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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,229	07/22/2003	Manuel Marquez-Sanchez	67079	6970
48940	7590	04/04/2005	EXAMINER	
KRAFT / FETF			DRODGE, JOSEPH W	
120 S. LASALLE STREET			ART UNIT	
SUITE 1600			PAPER NUMBER	
CHICAGO, IL 60603-3406			1723	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/624,229	MARQUEZ-SANCHEZ ET AL	
	Examiner	Art Unit	
	Joseph W. Drodge	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0304</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

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Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of the independent claims 1,10,13 and 19, scope of the terminology "more effective for removing the solute from a fluid...relative to an inorganic gel coating that has not been molecularly imprinted" is unclear, since neither types of solute or types of fluid have been recited, neither has any of the filtering parameters such as pressure, temperature, filter pore size, etc.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9,19,20 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Wei et al PGPUBS document US2001/004013655, published 11/15/2001.

Wei et al disclose an adsorbent filter material comprising fibrous support material with hydroxyl or amino groups (page 2, paragraphs 22 and 23), adsorbent gel coating adhered thereto, such as silica gel [as in claims 5-7 and 20], (page 7, paragraphs 64-66). For method claims starting with claim 19, see page 5, paragraph 50 concerning filtration of various solutes from liquids.

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Claim language pertaining to method of forming the gel coating on the fibrous support material has been given little patentable weight, since no corresponding structure or method steps are present in the instant claims, any method of adhering a gel coating material to a fibrous support material having charged groups is deemed to be equivalent.

For claims 2-4, cellulosic fibers are disclosed at page 3, paragraphs 31 and 32.

Claim 8 merely contains additional descriptive language so is not considered further limiting.

For claim 9, the filter is described without an accompanying housing or enclosure, hence inherently self-supporting.

For claim 25, removal of various organic pollutants is inherent from the water treatment systems said to be treated at paragraph 50.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 21-23,26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al in view of Cohen et al patent 5,906,743.

Claims 21-23,26 and 27 differ from Wei in requiring removal of caffeine solute from a beverage fluid or removal of other food-processing related solutes. However, Cohen et al teach a similar type filter (adsorbent coating adhered to a fibrous support media) in which caffeine is retained by adsorbent from coffee fluid column 3, line 66-column 4, line 24). It would have been obvious to one of ordinary skill in the art to have modified the Wei et al process to utilize it for caffeine separation from beverage, as taught by Cohen, since adsorbent filters have been shown to effectively process coffee and other beverages.

For claim 23, removal of caffeine may be associated with reduction of cholesterol component of coffee.

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For claims 24, 26 and 27, as the adsorption filter of Wei et al as modified in use by Cohen et al, is inherently adapted to provide for purification of other beverages and foodstuffs.

#### ALLOWABLE SUBJECT MATTER

Claims 10-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Independent claims 10 and 13 distinguish over the closest prior art, encompassing Vu et al publication "A facile method to deposit zeolites Y and L onto cellulose fibers" in view of the recited method step of "molecularly imprinting the solute on the inorganic gel coating with the template molecules present during formation of the inorganic gel coating". Vu et al and other publications teach formation of a coated fibrous filter by depositing gel or semi-solid material onto a fibrous substrate by processes including heating, pressurizing, and chemical bonding, not however suggesting "molecular imprinting with a template technique.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

March 21, 2005

  
JOSEPH DRODGE  
PRIMARY EXAMINER